

INFORMATION DISCLOSURE STATEMENT	Atty. Docket No.: 150.0088 0103	Serial No.: 10/045,345
	Applicant(s): Derderian et al.	Confirmation No.:
	Filing Date: 25 October 2001	Group: 2818

U.S. PATENT DOCUMENTS

Examiner Initial	Copy Enclosed	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
P D		5,068,199	11/26/91	Sandhu	—	—	
		5,130,172	07/14/92	Hicks et al.	—	—	
		5,130,885	07/14/92	Fazan et al.	—	—	
		5,314,727	05/24/94	McCormick et al.	—	—	
		5,318,920	06/07/94	Hayashide	—	—	
		5,342,800	08/30/94	Jun	—	—	
		5,352,488	10/04/94	Spencer et al.	—	—	
		5,372,849	12/13/94	McCormick et al.	—	—	
		5,372,962	12/13/94	Hirota et al.	—	—	
		5,392,189	02/21/95	Fazan et al.	—	—	
		5,427,974	06/27/95	Lur et al.	—	—	
		5,510,651	04/23/96	Maniar et al.	—	—	
		5,520,992	05/28/96	Douglas et al.	—	—	
		5,555,486	09/10/96	Kington et al.	—	—	
		5,566,045	10/15/96	Summerfelt et al.	—	—	
		5,561,307	10/01/96	Mihara et al.	—	—	
		5,581,436	12/03/96	Summerfelt et al.	—	—	
		5,608,247	03/04/97	Brown	—	—	
		5,612,560	03/18/97	Chivukula et al.	—	—	
		5,696,014	12/09/97	Figura	—	—	
		5,763,633	06/09/98	Vaartstra	—	—	
		5,874,364	02/23/99	Nakabayashi et al.	—	—	
		5,877,063	03/02/99	Gilchrist	—	—	
P D		5,935,648	08/10/99	Roberson et al.	—	—	

EXAMINER

PHU C T. DANG

Date Considered

7/18/2003

*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE STATEMENT	Atty. Docket No.: 150.0088 0103	Serial No.: 10/045,345
	Applicant(s): Derderian et al.	Confirmation No.:
	Filing Date: 25 October 2001	Group: 2818

Examiner Initial	Copy Enclosed	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
PD		5,959,327	09/28/99	Sandhu et al.	—	—	
		5,962,065	10/05/99	Weimer et al.	—	—	
		5,962,716	10/05/99	Uhlenbrock et al.	—	—	
		5,980,983	11/09/99	Gordon	—	—	
		5,985,714	11/16/99	Sandhu et al.	—	—	
		5,990,559	11/23/99	Marsh	—	—	
		6,015,743	01/18/00	Zahurak et al.	—	—	
		6,037,220	03/14/00	Chien et al.	—	—	
		6,049,101	04/11/00	Graettinger et al.	—	—	
		6,060,367	05/09/00	Sze	—	—	
		6,060,351	05/09/00	Parekh et al.	—	—	
		6,063,705	05/16/00	Vaartstra	—	—	
		6,074,945	06/13/00	Vaartstra et al.	—	—	
		6,078,072	06/20/00	Okudaira et al.	—	—	
		6,114,557	09/05/00	Uhlenbrock et al.	—	—	
		6,133,159	10/17/00	Vaartstra	—	—	
		6,197,628	03/06/01	Vaartstra et al.	—	—	
PD	X	6,281,125	08/28/01	Vaartstra et al.	—	—	

FOREIGN PATENT DOCUMENTS

Examiner Initial	Copy Enclosed	Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
PD		JP 10163131	06/19/98	Japan (Abstract)				
PD		WO 00/22658 A	06/20/00	PCT				
PD	X	WO 01/95376 A2	12/13/01	PCT				

EXAMINER PHUC T. DANG	Date Considered 7/18/2003
<small>*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</small>	

INFORMATION DISCLOSURE STATEMENT	Atty. Docket No.: 150.0088 0103	Serial No.: 10/045,345
	Applicant(s): Derderian et al.	Confirmation No.:
	Filing Date: 25 October 2001	Group: 2818

OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)

Examiner Initial	Copy Enclosed	Document Description
PD		Anderson et al., "Carborane Complexes of Ruthenium: A Convenient Synthesis of $[\text{Ru}(\text{CO})_3(\eta^5\text{-7,8-C}_2\text{B}_9\text{H}_{11})]$ and a Study of Reactions of This Complex," <i>Organometallics</i> , 14, 3516-3526 (1995).
		Aoyama et al., "Chemical Vapor Deposition of Ru and Its Application in (Ba,Sr)TiO ₃ Capacitors for Future Dynamic Random Access Memories," <i>Jpn. J. Appl. Phys.</i> , 38:2194-2199 (1999).
		Bai et al., "Low-temperature growth and orientational control in RuO ₂ thin films by metal-organic chemical vapor deposition", <i>Thin Solid Films</i> , 310, 75-80 (1997).
		Bennett et al., "Mono-olefin Chelate Complexes of Iron(0) and Ruthenium(0) with an Olefinic Tertiary Phosphine," <i>J. Chem. Soc. D.</i> , 7, 341-342 (1971).
		Cowles et al., "Relative Reactivity of Co-ordinated Ligands in the Dienyltricarbonyl-ruthenium Cation, $[(\text{dienyl})\text{Ru}(\text{CO})_3]^+$," <i>Chemical Commun.</i> , 392 (1969).
		Green et al., "Chemical Vapor Deposition of Ruthenium and Ruthenium Dioxide Films," <i>J. Electrochem. Soc.</i> , 132, 2677-2685 (1985).
		Igumenov, "MO CVD of Noble Metals", <i>J. De Physique IV</i> , 5, C5-489-C5-496 (1995).
		Johnson et al., "Chemistry," <i>Nature</i> , 901-902 (1967).
		Kaesz et al., "Low-Temperature Organometallic Chemical Vapor Deposition of Transition Metals," <i>Mat. Res. Soc. Symp. Proc.</i> , 131, 395-400 (1989).
		Kawahara, Takaaki et al., "(Ba, Sr)TiO ₃ Films Prepared by Liquid Source Chemical Vapor Deposition on Ru Electrodes," <i>Jpn. J. Appl. Phys.</i> , 35: 4880-4885 (1996).
		Liao et al., "Characterization of RuO ₂ thin films deposited on Si by metal-organic chemical vapor deposition," <i>Thin Solid Films</i> , 287, 74-79 (1996).
PD		Macchioni et al., "Cationic Bis- and Tris(η^2 -(pyrazol-1-yl)methane) Acetyl Complexes of Iron (II) and Ruthenium (II): Synthesis, Characterization, Reactivity, and Interionic Solution Structure by NOESY NMR Spectroscopy," <i>Organometallics</i> , 16, 2139-2145 (1997).

EXAMINER PHUC T. DANG	Date Considered 7/18/2003
*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

INFORMATION DISCLOSURE STATEMENT	Atty. Docket No.: 150.0088 0103	Serial No.: 10/045,345
	Applicant(s): Derderian et al.	Confirmation No.:
	Filing Date: 25 October 2001	Group: 2818

Examiner Initial	Copy Enclosed	Document Description
PD A		Nakamura et al., "Embedded DRAM Technology compatible to the 0.1 μm high speed Logics by using Ru pillars in cell capacitors and peripheral vias," <i>IEEE</i> , (1998). #3 IDS
		Park et al., "Metallorganic Chemical Vapor Deposition of Ru and RuO ₂ Using Ruthenocene Precursor and Oxygen Gas," <i>J. Electrochem. Soc.</i> , 147:203-209 (2000). M. Burson 1/6/02
		Senzaki et al., Chemical Abstract 128:264103, <i>Proc. Electrochem. Soc.</i> , 97-25 (Chemical Vapor Deposition), 933-43 (1997).
		Shin, "Characterization of RuO ₂ Thin Films Prepared by Hot-Wall Metallorganic Chemical Vapor Deposition," <i>J. Electrochem. Soc.</i> , 144, 1055 (1997).
		Sosinsky et al., "Hydrocarbon Complexes of Ruthenium. Part IV. Cyclic Dienyl Complexes", <i>J. Chem. Soc.</i> , 16-17, 1633-1640 (1975).
		Takagi et al., "RuO ₂ Bottom Electrodes for Ferroelectric (Pb, La)(Zr, Ti)O ₃ Thin Films by Metalorganic Chemical Vapor Deposition", <i>Jpn. J. Appl. Phys.</i> , 34, 4104-4107 (1995).
		Versteeg et al., "Metalorganic Chemical Vapor Deposition By Pulsed Liquid Injection Using An Ultrasonic Nozzle: Titanium Dioxide on Sapphire from Titanium (IV) Isopropoxide," <i>Journal of the American Ceramic Society</i> , 78, 2763-2768 (1995).
		Yuan, "Low-Temperature Chemical Vapor Deposition of Ruthenium Dioxide from Ruthenium Tetroxide: A Simple Approach to High-Purity RuO ₂ Films," <i>Chem. Mater.</i> , 5, 908 (1993).
PD		Yang, Doo Young et al., "Characterization of Ru Electrodes for Ru/(Ba,Sr)TiO ₃ /Ru Capacitors," <i>Ferroelectrics</i> , 1996. ISAF '96: Proceedings of the Tenth IEEE International Symposium on Applications of Ferroelectrics" New York, NY, August 18, 1996; pgs. 515-518.

EXAMINER PHUC T. DANG	Date Considered 7/18/2003
*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

**INFORMATION
DISCLOSURE
STATEMENT**

Atty. Docket No.: 150.00880103

Serial No.: 10/045,345

Applicant(s): Derderian et al.

Confirmation No.: 1310

Application Filing Date: 25 October 2001

Group: 2818

Information Disclosure Statement mailed:

December 12, 2002

U.S. PATENT DOCUMENTS

Examiner Initial	Copy Enclosed	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
PD	X	6,337,238	01/08/02	Nakabayashi			

FOREIGN PATENT DOCUMENTS

Examiner Initial	Copy Enclosed	Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
		None						

OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)

Examiner Initial	Copy Enclosed	Document Description
		None

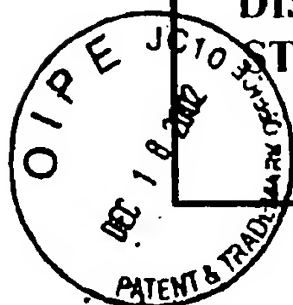
EXAMINER

PHUC T. DANG

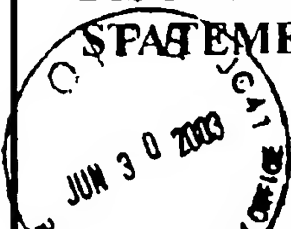
Date Considered

7/18/2003

*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



RECEIVED
DEC 20 2002
TECHNICAL SERVICES

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT 	Atty. Docket No.: 150.00880103	Serial No.: 10/045,345
	Applicant(s): Derderian et al.	Confirmation No.: 1310
	Application Filing Date: October 25, 2001	Group: 2818
	Supplemental Information Disclosure Statement mailed: June <u>25</u> , 2003	

U.S. PATENT DOCUMENTS

Examiner Initial	Copies Enclosed	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
PD	X	4,953,989	09/04/90	Hooykaas	—	—	

FOREIGN PATENT DOCUMENTS

Examiner Initial	Copies Enclosed	Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No

OTHER DOCUMENTS (Including Authors, Title, Date, Pertinent Papers, etc.)

Examiner Initial	Copies Enclosed	Document Description

EXAMINER PHUC T. DANG	Date Considered 7/18/2003
*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	